

REMARKS/ARGUMENTS

After the foregoing Amendments, Claims 1-5 and 7-10 are currently pending in this application. Claims 6 and 11 have been canceled without prejudice. Claims 1-4 and 7-10 have been amended. Applicant submits that no new matter has been introduced into the application by these amendments.

Claim Rejections - 35 USC §103

Claims 1-5 and 7-10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 7,170,856 to Ho et al. (hereinafter “Ho”), in view of U.S. Publication No. 2003/0053416 to Ribas-Corbera (hereinafter “Ribas-Corbera”), and further in view of U.S. Patent No. 6,587,480 to Higgins (hereinafter “Higgins”).

Regarding claims 1 and 8, Ho discloses a jitter buffer that receives a plurality of data packets, buffers the plurality of data packets and plays data from the plurality of data packets at a constant bit rate. The data is not played until data is accumulated up to a low threshold. Once data begins playing, it will continue to be played until the buffer overflows or until the buffer is empty, even if the level of data falls below the threshold. Then, alarm data is played until data is accumulated up to the low threshold.

Ho does not teach, suggest or disclose halting the reception of data from the data source, stopping the outputting of the output data from the buffer or discarding input data. Ho only teaches receipt of data into the buffer until the buffer overflows and outputting of data till the buffer is empty. Ho states that “if the high threshold is exceeded, the jitter buffer is flushed to start fresh with new packets.” This indicates that the buffer output data is reduced to zero rather than stopping the outputting of the output data from the buffer once the low threshold is attained. In addition Ho teaches that “data is flushed so that the receiving end of the circuit can catch up with the sending end of the circuit.” This indicates that data continues to flow into the buffer and a mechanism to halt the reception of data from the data source is not present. Since Ho does not halt the reception of data into the buffer, the data flows freely and a mechanism to discard the data input is not present. Ho does not teach either of the steps of stopping adding data to the buffer and discarding input data to the data source.

Ho does not include the step of outputting the stored output data until the buffer is substantially empty as claimed in the present invention. Instead, Ho discloses that data is output until “the buffer runs dry” (column 12, line 54). This further distinguishes Ho in that a change of rate method for outputting data is not disclosed in Ho, as in the present application. Ho does not disclose a change of rate between a first constant output and a second constant output in a buffer.

Rather, Ho suggests that the output rate is constantly adjusted depending upon how much data is in the buffer and how close the data in the buffer gets to the high or low threshold. Furthermore, changes in output rate as described in Ho do not involve the steps specified in the present application.

Similarly, Ribas-Corbera concerns an improved generalized reference decoder that operates according to any number of sets of rate and buffer parameters for a given bit stream. Although Ribas-Corbera mentions changing bit rates, it does not disclose a change of rate from a first constant to a second constant nor does it disclose changes in output rate as specified in the present application. In addition, Ribas-Corbera does not disclose halting or discarding input data from the data source. Accordingly, Ribas-Corbera fails to cure the deficiencies of the Ho reference.

Higgins does not cure the defects of Ho and Ribas-Corbera. Higgins discloses a system for adapting a data stream received into a computer from an isochronous user information path for use by a video file viewing application. In Higgins, data is fed into a ring buffer until the ring buffer becomes full. When the ring buffer becomes full, packets of data are discarded. No mention is made as to whether the discarded packets are from the buffer or the input stream. In addition, Higgins does not teach, suggest or disclose halting input data by the data

source. Moreover, neither Ho or Ribas-Corbera teach, suggest or disclose halting the input data as acknowledged by the examiner.

Based on the foregoing, applicants respectfully submit that the combination of the three cited references do not lead to a change of rate method for a buffer that follows the steps specified in the present application and therefore amended independent claims 1 and 8 are patentable over the Ho, Ribas-Corbera, and Higgins references, whether taken alone or in any combination with one another.

Claims 2-5 and 7 depend from patentable amended independent claim 1, and are therefore patentable for at least the same reasons as patentable amended independent claim 1.

Likewise, claims 9-10 are dependent upon patentable independent claim 8, and are therefore patentable for at least the same reasons as patentable amended independent claim 8.

Based on the arguments presented above, withdrawal of the 103(a) rejection of claims 1-5 and 7-10 is respectfully requested.

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Application No.: 10/511,367


Conclusion

If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephone interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the present application, including claims 1-5 and 7-10, are in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

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Enclosure (1)